

## **Report Out Slides**

## **Geological Hazards**

Earthquake, Tsunami, Landslides, and Volcanoes









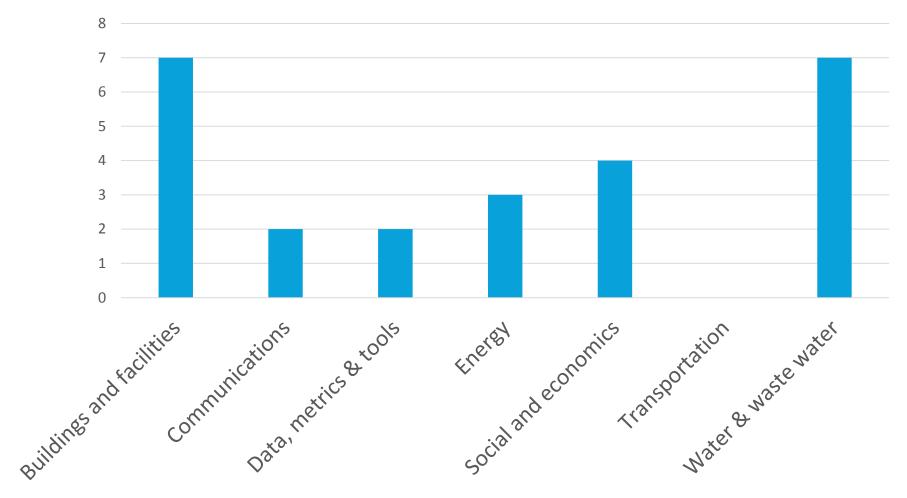




# **Interdependencies Breakout**



#### **Group composition**













## **Interdependencies Breakout Question #1**



- Thinking about geological hazards, what are the primary concerns with respect to interdependencies?
  - Communications rely on other systems and are needed for all others (e.g., generators to power data centers, fuel for the generators, transportation for fuel, water for cooling), similarly for transportation. There are many other examples.
  - Geological hazards have large regional impact, and affect underground, ground-level, and aerial components.
  - Geological hazards often trigger cascading effects at a regional level, and we rarely design for the combination of these effects and the accumulation of damage.
  - There are unique challenges in risk communication and perception (requires probabilistic understanding) due to geological time.











#### **Interdependencies Breakout Question #2**



- How does your sector account for interdependencies with other sectors in the planning phase (not recovery)?
- If your sector does not coordinate with others regularly, what plans can you make to change this lack of communication in the planning phase?
  - Disclosure
    - Work on warning systems (this is particularly challenging for geological hazards).
    - Establish venues to share minimum required amount of information without interfering with security (e.g., lifelines council in SF).
  - In the lack of information, build redundancy and minimize dependencies.
    - It can be stepwise and embedded in other initiatives.











#### **Interdependencies Breakout Question #3**



- How can the standing committees work together to address the interdependencies challenges that arise during this hazard event?
  - Prioritize ways to minimize immediate dependencies
  - Create a catalog of them, to limit dependencies
  - Develop standards around dependencies (at different scales)
  - Don't let the perfect be the enemy of the good











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